A

AAMODT R see PATTERSON R E et al

AGERSKOV K and HENRIKSEN O Effect of heel-raising exercise upon collateral resistance in patients with occlusion of the superficial femoral artery, 22

ALFARO A, SCHAIBLE T F, MALHOTRA A, YIPINTSOI T and SCHEUER J Impaired coronary flow and ventricular function in hearts of hypertensive rats, 553

ALLARD J R, GERTZ E W, VERRIER E D, BRISTOW J D and HOFFMAN J I E Role of the pericardium in the regulation of myocardial blood flow and its distribution in the normal and acutely failing left ventricle of the dog, 595

ALLWORK S P see MISAKI T et al AMLIE J P see Kuo C-S et al ANDERS G see SENGES J et al ANDÓ A see ÉDES I et al ASANO G see IMAI K et al ASHTON N G see SAMMEL N L et al ASHTON N G see SAMMEL N L et al ASHTOR R W see NOREN G R et al

AUBERT A E see MINTEN J et al

AUSSEDAT J Effect of uridine supply on glycogen resynthesis
after ischaemia in the isolated perfused rat heart, 145

AZUMA J see SAWAMURA A et al

AZUMA T and OHHASHI T Factors modifying the local arterial hyperresponsiveness of vibration-induced white finger, 223

FI

BAILEY I A, CAREY F, HAWORTH D, and SMITH H J Effects of vascular trauma and transient myocardial ischaemia on coronary venous prostaglandin levels in the dog, 127

BALL M R see Dennis S C et al Barritt J see Lamont S V and Barritt J Bashour F A see Downey H F et al Bell R N see Peters A M et al Bentall H H see Misaki J et al

Beranek A E and Stowe D F Adenosine potentiates coronary flow and inhibits oxygen consumption during isoprenaline infusion in isolated pig hearts, 353

BERTRIX L see TIMOUR-CHAH Q et al BETTS N J see MURDAY A J et al

BIRKHEAD J S, VAUGHAN WILLIAMS E M, GWILT D J, TAN-QUERAY A, and CAZES C Heart rate and QT interval in subjects adapted to beta-blockade: bradycardia and hypotension as uncorrelated adaptations, 649

BLEEKER W K see Op't Hof T et al
BOLLI R, DAVENPORT N J, GOLDSTEIN R E, and EPSTEIN S
E Myocardial proteolysis during acute myocardial ischaemia, 274

BONAZZI O see FERRARI A et al BOUCEK R J see SIMPSON C F and BOUCEK R J

BOUMAN L N see Op't Hof T et al BOUTHIER J E see SIMON A C et al BOUZOUITA K see TIMOUR-CHAH Q et al

BRAAKMAN R, SIPKEMA P and WESTERHOF N Steady state and instantaneous pressure-flow relationships: characterisation of the canine abdominal periphery, 577

Brachmann J see Senges J et al Braimbridge M V see Yamamoto F et al Bristow J D see Allard J R et al Brouckaert C J see Gregory M A et al

BROWER R W, MEU S and SERRUYS P W A model of asynchronous left ventricular relaxation predicting the bi-exponential pressure decay, 482 C

CAMPBELL T J Kinetics of onset of rate-dependent effects of Class I antiarrhythmic drugs are important in determining their effects on refractoriness in guinea-pig ventricle, and provide a theoretical basis for their subclassification, 344

and VAUGHAN WILLIAMS E M Voltage- and timedependent depression of maximum rate of depolarisation of guinea-pig ventricular action potentials by two new antiarrhythmic drugs, flecainide and lorcainide, 251

CANNON P J see Powers E R and CANNON P J

CAREY F see BAILEY I A et al CARROLL R J see FALSETII H L et al CASTELIANI S see SERNERI G G N et al CAZES C see BIRKHEAD J S et al CHAH Q TIMOUR SEE TIMOUR-CHAH Q CHEN C J see FALSETII H L et al CHEN C-M see HARIMAN R J and CHEN C-M

CHIEN K R, CRIE J S, DECKER R S, and WILDENTHAL K Influence of chlorpromazine of lysosomal alterations during myocardial ischaemia, 407

CHRISTÉ G Effects of low (K⁺)_o on the electrical activity of human cardiac ventricular and Purkinje cells, 243

COFFELT R J see Wikman-Coffelt J et al COFFMAN J D see Halperin J L et al COHEN R A see Halperin J L et al COLLINS B A JONES see JONES-COLLINS B A CONNELLY-FITINGHOFF M see SOWERS J R et al COURT Y D SYNDERCOMBE SEE SYNDERCOMBE-CC

COFFELT J WIKMAN SEE WIKMAN-COFFELT J

COURT Y D SYNDERCOMBE See SYNDERCOMBE-COURT Y D
CRAMER J A see FALSETTI H L et al
CRIE J S see CHIEN K R et al

CROME R see HEARSE D J et al CRYSTAL G J see DOWNEY H F et al

CSANÁDY M see ÉDES I et al CUMMINGS M F, STEELE P M, MAHAR L J M, FREWIN D B, and RUSSELL W J The role of adrenal medullary catecholamine release in the response to a cold pressor test, 189

CUTILLETTA A F see POLIMENI P I et al

CZARNECKI W and NOBLE M I M Mechanism of the inotropic action of inosine on canine myocardium, 735

D

DAGENAIS G R see ROULEAU J R et al DAGGETT W M see GEFFIN G A et al DAVENPORT N J see BOLLI R et al

DE GEEST H see MINTEN J et al

DE GENDE, A O GRASSI see GRASSI DE GENDE A O

DE VENTE J see GEUZE R H and DE VENTE J
DE WERF F VAN see VAN DE WERF F

DECKER R S see CHIEN K R et al
DENNIS S C, SHATTOCK M J, HEARSE D J, BALL M R, SOCHOR M,
and MCLEAN P Two different metabolic responses to
ischaemia: inherent variability or artefact? 489

DOMENECH R J see Pescio S et al DORLING P R see ROBINSON W F et al

Downey H F, Crystal G J, and Bashour F A Asynchronous transmural perfusion during coronary reactive hyperaemia, 200

DROP L J see Geffin G A et al
DUKES I D see VAUGHAN WILLIAMS E M and DUKES I D
DUMESNIL J-G see ROULEAU J R et al

E

ÉDES I, ANDÓ A, CSANÁDY M, MAZAREÁN H, and GUBA F Enzyme activity changes in rat heart after chronic alcohol ingestion, 691

EINZIG S see NOREN G R et al EKSTROM M see HAYASHI I et al ELLIOTT R L see SAMMEL N L et al EMANUEL R see HAYWARD R P et al

EMERY R W, ESTRIN J A, WAHLER G M, and Fox I J The left ventricular mechanoreceptor reflex: characterisation of the afferent pathway, 214

EPSTEIN S E see BOLLI R et al ESTRIN J A see EMERY R W et al

FALSETTI H L, CARROLL R J, SWOPE R D, and CHEN C J with the technical assistance of CRAMER J A, LENGTH R A, and LAUGHLIN D E Turbulent blood flow in the ascending aorta of dogs, 427

FAUCON G see TIMOUR-CHAH O et al

FERRARI A, BONAZZI O, GREGORINI L, GARDUMI M, PERONDI R, and Mancia G Modification of the baroreceptor control of atrioventricular conduction induced by digitalis in man,

FITTINGHOFF M CONNELLY see CONNELLY-FITTINGHOFF M FITZGERALD D E, O'SHAUGHNESSY A M, and KEAVENY V T Pulsed Doppler: a classification of results of diameter, velocity and volume flow measurement in diseased common carotid arteries, 122

FORRESTER T see WILLIAMS C A and FORRESTER T Fox I J see EMERY R W et al FREED P see HAYASHI I et al

FREEMAN A R see MARTIN F G et al FREWIN D B see CUMMINGS M F et al

GARDUMI M see FERRARI A et al GARTSIDE I see LAB M J et al GEEST H DE see DE GEEST H

GEFFIN G A, DROP L J, O'KEEFE D D, ROSENTHAL S V, NEWELL J B, JACOCKS M A, and DAGGETT W M with the technical assistance of Tirus J S Global and regional function in the regionally ischaemic left ventricle related to plasma ionised calcium, 415

GENDE A O GRASSI DE SEE GRASSI DE GENDE A O

GERSHLICK A H see MURDAY A J et al

GERTZ E W see ALLARD J R et al

GEUZE R H and DEVENTE J Effects of duration of ventricular fibrillation and heart massage on haemodynamic responses after defibrillation in dogs, 282

GEWIRTZ H see SUN Y et al GILLIS R A see WILLIFORD D J et al GOLDSTEIN R E see BOLLI R et al

GOPAL M A, NEILL W A, OXENDINE J M Effects of nitroprusside on myocardial blood flow in acute regional coronary ischaemia in conscious dogs with and without left ventricular distension, 267

GRASSI DE GENDE A O see IMAI K et al GREEN M, GUIDERI G and LEHR D Effectiveness of antiarrhythmic agents in preventing death in ventricular fibrillation induced by isoprenaline in desoxycorticosterone-pretreated rats, 562

GREGORINI L see FERRARI A et al

GREGORY M A, BROUCKAERT C J, and WHITTON I D Characterisation of normal human myocardium by means of morphometric analysis, 177

GUBA F see ÉDES I et al

GUGLIELMI J-P see MOUTET J-P et al GUIDERI G see GREEN M et al GWILT D J see BIRKHEAD J S et al

HAITES N E see MOWAT D H R et al

HALPERIN J L, COHEN R A, and COFFMAN J D Digital vasodilatation during mental stress in patients with Raynaud's disease, 671

HAMER J see HAYWARD R P et al HAMMAN H-D see SENGES J et al HANNAN J see McGREGOR C G A et al HARADA H, see SAWAMURA A et al

HARIMAN R J and CHEN C-M Effects of hyperkalaemia on sinus nodal function in dogs: sino-ventricular conduction, 509

HARRIS P Evolution and the cardiac patient: 1 Ventilation and perfusion: origins of pulmonary oedema; 2 Distribution of blood flow: origins of angina: review, 313

3 Origins of the blood pressure: 4 Origins of renal function: review, 373

5 Origins of neuro-endocrine control of water and salt balance; 6 Origins of congestive cardiac failure: review, 440 HASEGAWA H see SAWAMURA A et al

HAWKEY C M see PEARCE P C et al

HAWORTH D see BAILEY I A et al HAYASHI I, WASFIE T, FREED P, EKSTROM M, POLANSKI J, YOSHIZU H, STEIN P, and KANTROWITZ A A method for generating obstructive thrombi in the coronary arteries of the conscious dog, 294: correspondence, 774

HAYWARD R P, HAMER J, TAGGART P, and EMANUEL R Observations on the biphasic nature of digitalis electrophysiological actions in the human right atrium, 533

HEARSE D J, CROME R, YELLON D M, and Wyse R Metabolic and flow correlates of myocardial ischaemia, 452 see also DENNIS S C et al

YAMAMOTO F et al

HEATH D, JAGO R, and SMITH P The vasculature of the carotid body, 33

HENRIKSEN O see AGERSKOV K and HENRIKSEN O HERMENT A see MOUTET J-P et al

HIGGINS C B see SLUTSKY R A and HIGGINS C B

HOFFMAN J I E see ALLARD J R et al HOTVEDT R, PLATOU E S and REFSUM H Electrophysiological effects of thoracic epidural analgesia in the dog heart in situ.259

HOUSER S R see MARTIN F G et al HOWELL J McC see ROBINSON W F et al HUGHES C F see SAMMEL N L et al

HUIS G A VAN SEE VAN HUIS G A

1

IMAI K, WANG T, MILLARD R W, ASHRAF M, KRANIAS E G. ASANO G, GRASSI DE GENDE A O, NAGAO T, SOLARO R J, and Schwartz A Ischaemia-induced changes in canine cardiac sarcoplasmic reticulum, 696

3

JACOB R see MEDUGORAC I and JACOB R JACOCKS M A see GEFFIN G A et al JAGO R see HEATH D et al JAUERNIG R see SENGES J et al JODALEN H G see ROTEVATN S et al JOHNSON R N see SAMMEL N L et al JONES-COLLINS B A see PATTERSON R E et al JONGSMA H J see O'PT HOF T et al JUDY W V see VEIGL V L and JUDY W V

K

KANTROWITZ A see HAYASHI I et al KEAVENY V T see FITZGERALD D E et al KESTELOOT H see MINTEN J et al

KISHIMOTO S see SAWAMURA A et al

KLEIN I Colchicine stimulates the rate of contraction of heart cells in culture, 459

KOOMEN J, NOORDHOEK J, and ZIMMERMAN A N E Ca²⁺-free perfusion of isolated rat heart: early irreversible changes and discrepancy between functional impairments and release of cellular constituents, 476

KOPIN I J see WILLIFORD D J et al

KOWEY P R, VERRIER R L, and LOWN B Decreased vulnerability to ventricular fibrillation by vasodilator-induced baroreceptor sensitisation, 106

KRALL J F see Sowers J R et al KRANIAS E G see IMAI K et al KREUZER H see VOGT A et al KÜBLER W see SENGES J et al

KUO C-S, AMLIE J P, MUNAKATA K, REDDY C P, and SURAWICZ B Dispersion of monophasic action potential durations and activation times during atrial pacing, ventricular pacing, and ventricular premature stimulation in canine ventricles, 152

KUPARI M Reproducibility of the systolic time intervals: effect of the temporal range of measurements, 339

L

Lab M J, Gartside I, and Wassermann S — Analogue computation of indices of contraction from regional measurements in intact hearts: instruments and techniques, 767

LAKHAL M see TIMOUR-CHAH Q et al

LAMONT S V and BARRITT G J Effects of adrenaline on a compartment of slowly-exchangeable calcium in the perfused rat heart, 88

LANG J SEE TIMOUR-CHAH Q et al
LAUGHLIN D E SEE FALSETTI H L et al
LAURENT S SEE SIMON A C et al
LAVENDER J P SEE PETERS A M et al
LEDINGHAM S J SEE MURDAY A J et al
LEHR D SEE GREEN M et al
LENGTH R A SEE FALSETTI H L et al
LEVENSON J A SEE SIMON A C et al
LEVY M N SEE MACE S E and LEVY M N

WALLICK D et al Lewis C T see Murday A J et al

Lewis J M O and MacLeop N A blood analogue for the experimental study of flow-related thrombosis at prosthetic heart valves, 466

LIE R K see ROTEVATN S et al LOWN B see KOWEY P R et al

LYNGBORG K see SEITZ W S and LYNGBORG K

М

MACE S E and LEVY M N Autonomic nervous control of heart rate: sympathetic-parasympathetic interactions and age related differences, 547

McGregor C G A , Hannan J, Smith A F, Muir A L and Wheatley D J A study of cold cardioplegic myocardial protection in rats: an experimental model using the uptake of technetium 99m pyrophosphate and enzyme activity as parameters of injury, 70

MACHO P see Pescio S et al MACKAAY A J C see Op't Hop T et al MCLEAN P see Dennis S C et al MACLEOD N see Lewis J M O and MACLEOD N MAHAR L J M see CUMMINGS M F et al MALHOTRA A see ALFARO A et al MALL G see MATTFELDT T and MALL G MANCIA G see FERRARI A et al MANNELLI M see SERNERI G G N et al MANNING A S see YAMAMOTO F et al MARINO T A see MARTIN F G et al

MARTIN F G, FREEMAN A R, MARINO T A, and HOUSER S R Potassium measurements in the extracellular spaces of normal and failing cat myocardium, 642

MASOTTI G see SERNERI G G N et al MASUDA Y see WALLICK D et al MATHIE R T see PETERS A M et al

MATTFELDT T and MALL G Dipyridamole-induced capillary endothelial cell proliferation in the rat heart – a morphometric investigation, 229

MAZAREÁN H see ÉDES I et al

MEDUGORAC I and JACOB R Characterisation of left ventricular collagen in the rat, 15
MEU S see Brower R W et al

MICHOROWSKI B see RIEMERSMA R A and MICHOROWSKI B

MIKELL F L see Noren G R et al MILLARD R W see IMAI K et al

MILLS P G see MURDAY A J et al
MINTEN J, VAN DE WERF F, AUBERT A E, KESTELOOT H, and DE
GEEST H Apparent pulse wave velocity in the canine
superior vena cava. 627

MISAKI T, ALLWORK S P, and BENTALL H H Longterm effects of cryosurgery in the sheep heart, 61

MOST A S see Sun Y et al

MOUTET J-P, HERMENT A, GUGLIELMI J-P, PIECHOCKI M, and PERONNEAU P Estimation of blood-flow quality by statistical analysis or an ultrasonic Doppler signal: application to the study of perturbations caused by a vascular stenosis, 678

Mowat D H R, Harres N E, and Rawles J M Aortic blood velocity measurement in healthy adults using a simple ultrasound technique, 75

Muir A L see McGregor C G A et al

MUNAKATA K see Kuo C-S et al

Murday A J, Gershlick A H, Syndercombe-Court Y D, Ledingham S J, Betts N J, Lewis C T, and Mills P G Intimal hyperplasia in arterial autogenous vein grafts: a new animal model, 446

MURRAY A see VELLANI C W and MURRAY A

N

NAGAO T see IMAI K et al
NEILL W A see GOPAL M A et al
NEWELL J B see GEFFIN G A et al
NOBLE M I see CZARNECKI W and NOBLE M I M
NOORDHOEK J see KOOMEN J M et al
NOREN G R, STALEY N A, EINZIG S, MIKELL F L, and ASINGER R
W Alcohol-induced congestive cardiomyopathy: an
animal model, 81

NORRIS R M see SAMMEL N L et al

0

Ogura K see Sawamura A et al Ohhashi T see Azuma T and Ohhashi T Ohley W see Sun Y et al

O'KEEFE D D see GEFFIN G A et al OLSEN E G J see PEARCE P C et al

OP'T HOF T, MACKAAY A J C, BLEEKER W K, JONGSMA H J, and BOUMAN L N Differences between rabbit sinoatrial pacemakers in their response to Mg, Ca and temperature, 526

O'SHAUGHNESSY A M see FITZGERALD D E et al OTTEN M D see POLIMENI P I et al

OXENDINE J M see GOPAL M A et al

PARMLEY W W see WIKMAN-COFFELT J et al

PATTERSON R E, JONES-COLLINS B A, AAMODT R, and RO Y M Differences in collateral myocardial blood flow following gradual vs abrupt coronary occlusion, 207

PEARCE PC, HAWKEY CM, SYMONS C, and OLSEN EGJ Effect of triac and β-adrenergic blocking agents on the myocardium of developing rats, 7

PENNA M see PESCIO S et al

PENNY W J and SHERIDAN D J Arrhythmias and cellular electrophysiological changes during myocardial 'ischaemia' and reperfusion, 363, reprinted in October following page 648

PERONDI R see FERRARI A et al PERONNEAU P see MOUTET J-P et al

PESCIO S, MACHO P, PENNA M, and DOMENECH R J Changes in total and transmural coronary blood flow induced by ethanol, 604

PETERS A M, MATHIE R T, WALPORT M J, REAVY H J, BELL R N, and LAVENDER J P Measurement of splenic blood flow in the anaesthetised dog using electromagnetic flowmetry and indium labelled platelets, 710

PIECHOCKI M see MOUTET J-P et al PIENE H see SUND T and PIENE H PLATOU E S see HOTVEDT R et al POLANSKI J see HAYASHI I et al

POLIMENI P I, CUTILLETTA A F, and OTTEN M D Cation distributions in the hypertrophic myocardium (aortic constriction) of the rat, 170

POWERS E R and CANNON P J Effect of hypertonic mannitol infusion during prolonged coronary occlusion, 518

RAPCSAK M see WIKMAN-COFFELT J et al RAWLES J M see MOWAT D H R et al REAVY H J see PETERS A M et al REDDY C P see Kuo C-S et al REFSUM H see HOTVEDT R et al RI H D see Vogt A et al

RIEMERSMA R A and MICHOROWSKI B Lysolecithin and acute coronary ligation in the anaesthetised dog, 505

Rizos I see Senges J et al

Ro Y M see PATTERSON R E et al ROBINSON W F, HOWELL J McC, and DORLING P R Cardiomyopathy in generalised glycogenosis type II in cattle, 238

ROSENTHAL S V see GEFFIN G A et al

ROTEVATN S, JODALEN H G, and LIE R K Propranolol induced lipid accumulation and mitochondrial granularity in myocardial cells, 290

ROTHMAN U see SVEDMAN P et al

ROULEAU J L see WIKMAN-COFFELT J et al

ROULEAU J R, ROY L, DUMESNIL J-G and DAGENAIS G R Coronary vasodilator reserve impairment distal to systolic coronary artery compression in dogs, 96

ROY L see ROULEAU J R et al

RUSSELL W J see CUMMINGS M F et al

SAFAR M E see SIMON A C et al SAMMEL N L, NORRIS R M, HUGHES C F, JOHNSON R N, ASHTON N G, and Elliott R L Severity of canine myocardial infarcts in relation to indices of oxygen demand: preservation of myocardial creatine kinase activity by vagal stimulation and propranolol, 50

SAWAMURA A, AZUMA J, HARADA H, HASEGAWA H, OGURA K. SPERELAKIS N, and KISHIMOTO S Protection by oral pretreatment with taurine against the negative inotropic effects of low-calcium medium on isolated perfused chick heart, 620

SCARTI L see SERNERI G G N et al SCHAIBLE T F see ALFARO A et al SCHEUER J see ALFARO A et al SCHMIDT G see Vogt A et al

Schwartz A see Imai K, et al Sederholm M and Sylvén C Relation between ST and QRS vector changes and myoglobin release in acute myocardial

infarction, 589

SEITZ W S and LYNGBORG K A pressure independent orifice equation for the estimation of diastolic mitral valve area in mitral insufficiency: correlation with cardiac catheterisation data using a radioactive krypton indicator method for the determination of regurgitant filling volume, 762

SENGES J, RIZOS I, BRACHMANN J, ANDERS G, JAUERNIG R, HAMMAN H-D, and KÜBLER W Effect of nifedipine and AQ-A 39 on the sinoatrial and atrioventricular nodes of the rabbit and their antiarrhythmic action on atrioventricular

nodal reentrant tachycardia, 132

SERNERI G G N, MASOTTI G, CASTELLANI S, SCARTI L, TROTTA F, and MANNELLI M Role of PGE2 in the modulation of the adrenergic response in man, 662

SERRUYS P W see BROWER R W et al SHATTOCK M J see DENNIS S C et al

SHERIDAN D J see PENNY W J and SHERIDAN D J

SIEVERS R see WIKMAN-COFFELT J et al

SIMON A C, LAURENT S, LEVENSON J A, BOUTHIER J E, and SAFAR M E Estimation of forearm arterial compliance in normal and hypertensive men from simultaneous pressure and flow measurements in the brachial artery, using a pulsed Doppler device and a first-order arterial model during diastole, 331

SIMPSON C F and BOUCEK R J The B-aminopropionitrile-fed turkey: a model for detecting potential drug action on

arterial tissue, 26

SIPKEMA P see BRAAKMAN R et al WESTERHOF N et al SLEIGHT P Editorial III (January)

SLUTSKY R A and HIGGINS C B Intravascular and extravascular pulmonary fluid volumes. III Response to sustained left atrial hypertension, 113

SMISETH O A Inosine infusion in dogs with acute ischaemic left ventricular failure: favourable effects on myocardial performance and metabolism, 192

SMITH A F see McGREGOR C G A et al

SMITH H J see BAILEY I A et al SMITH P see HEATH D et al SOCHOR M see DENNIS S C et al

SOLARO R J see IMAI K et al SOWERS J R, CONNELLY-FITTINGHOFF M, TUCK M L, and KRALL J F Acute changes in noradrenaline levels do not alter lymphocyte β-adrenergic receptor concentrations in man, 184

SPERELAKIS N see SAWAMURA A et al STALEY N A see NOREN G R et al STEELE P M see Cummings M F et al STEIN P see HAYASHI I et al

STOWE D F see BERANEK A E and STOWE D F STUESSE S L see WALLICK D et al

SUN Y, MOST A S, OHLEY W, and GEWIRTZ H Estimation of instantaneous blood flow through a rigid, coronary artery stenosis in anaesthetised domestic swine, 499

SUND T and PIENE H Right ventricular mechanics: a comparison of models, 320

SURAWICZ B see Kuo C-S et al

SVEDMAN P, NOSSLIN B, and ROTHMAN U Radio-active dextran particles for studying circulation in animals, 656

SWOPE R D see FALSETTI H L et al SYLVÉN C see SEDERHOLM M and SYLVÉN C SYMONS C see PEARCE P C et al

SYNDERCOMBE-COURT Y D see MURDAY A J et al

TAGGART P see HAYWARD R P et al TANQUERAY A see BIRKHEAD J S et al

TIMOUR-CHAH Q, LANG J, LAKHAL M, BOUZOUITA K, BERTRIX L and FAUCON G Blockade by verapamil of cholinergic effects on atrial specialised tissue in the anaesthetised dog,

TITUS J S see GEFFIN G A et al TROTTA F see SERNERI G G N et al TUCK M L see Sowers J R et al

VALENZUELA F and VASSALLE M Interaction between overdrive excitation and overdrive suppression in canine Purkinje fibres, 608

VAN DE WERF F see MINTEN J et al VAN HUIS G A see WESTERHOF N et al

VASSALLE M see VALENZUELA F and VASSALLE M

VAUGHAN WILLIAMS E M and DUKES I D The absence of effect of chemical sympathectomy on ventricular hypertrophy induced by hypoxia in young rabbits, 379

VAUGHAN WILLIAMS E M see also BIRKHEAD J S et al CAMPBELL T J and

VAUGHAN WILLIAMS E M VEIGL V L and JUDY W V Reproducibility of haemodynamic measurements by impedance cardiography, 728

VELLANI C W and MURRAY A Mechanisms of fixed coupled ventricular ectopic complexes, 390

VENTE J DE see DE VENTE J VERRIER E D see ALLARD J R et al

VERRIER E D SEE CHARGOV P R et al

VOCT A. RI H D, SCHMIDT G, and KREUZER VOGT A, RI H D, SCHMIDT G, and KREUZER H Endoanaesthesia of left ventricular mechanoreceptors by steady state infusion of lignocaine and the influence of dopamine, 740

WAHLER G M see EMERY R W et al WALLICK D, STUESSE S L, MASUDA Y, and LEVY M N Effects of digoxin on the control of heart rate and atrioventricular conduction in the dog, 400 WALPORT M J see PETERS A M et al

WALSH R A see WILLIFORD D J et al

WANG T see IMAI K et al

WASFIE T see HAYASHI I et al WASSERMAN S see LAB M J et al

WEISE V see WILLIFORD D J et al WERF F VAN DE SEE VAN DE WERF F

WESTERHOF N, SIPKEMA P, and VAN HUIS G A Coronary pressure-flow relations and the vascular waterfall, 162 see BRAAKMAN R et al

WHEATLEY D J see McGregor C G A et al

WHITTON I D see GREGORY M A et al

WIKMAN-COFFELT J, COFFELT R J, RAPCSAK M, SIEVERS R, ROULEAU J L, and PARMLEY W W A new apex-ejecting perfused rat heart preparation: relation between coronary flow and loading conditions, 747

RAPCSAK M, SIEVERS R, ROULEAU J L, and PARMLEY W W Verapamil, propranolol, and hydralazine protect against the acute cardiac depression induced by adriamycin,

WILDENTHAL K see CHIEN K R et al
WILLIAMS C A and FORRESTER T Possible source of adenosine triphosphate released from rat myocytes in response to hypoxia and acidosis, 301

WILLIAMS E M VAUGHAN SEE VAUGHAN WILLIAMS E M WILLIFORD D J. ZAVADIL A P. WALSH R A, WEISE V, KOPIN I J. and GILLIS R A Influence of vagotomy on changes in feline plasma catecholamine levels induced by occlusion of either the left or right coronary vessel, 568

Wyse R see HEARSE D J et al

YAMAMOTO F, MANNING A S, BRAIMBRIDGE M V, and HEARSE D J Nifedipine and cardioplegia: rat heart studies with the St Thomas' cardioplegic solution, 719

YELLON D M see HEARSE D J et al YIPINTSOI T see ALFARO A et al YOSHIZU H see HAYASHI I et al

ZAVADIL A P see WILLIFORD D J et al ZIMMERMAN A N E see KOOMEN J M et al

- Adenosine potentiates coronary flow and inhibits oxygen consumption during isoprenaline infusion, isolated perfused guinea pig hearts, 353
- triphosphate released from rat myocytes in response to hypoxia and acidosis, possible source, 301
- Adrenaline and intracellular calcium, perfused rat heart, 88 Adriamycin induced acute cardiac depression, verapamil, propranolol, and hydralazine in protection against, 43
- Afferent pathway, characterisation, left ventricle, mechanoreceptor reflex, 214
- Afterioad in perfused heart, new apex-ejecting perfused heart preparation, rat, 747
- Alcohol induced congestive cardiomyopathy: animal model, 81
 ingestion, chronic, enzyme activity changes, rat heart, 691
- Analogue computation of indices of contraction from regional measurements in intact hearts: instruments and techniques, 767
- Angina, origins, distribution of blood flow, 316
- Antiarrhythmic agents, effectiveness, in preventing death in ventricular fibrillation induced by isoprenaline in desoxy-corticosterone-pretreated rats, 562
- —— differential effects on cardiac refractoriness, 344

 Aortic blood velocity measurement in healthy adults using a
- simple ultrasound, 75

 Apex-ejecting perfused heart preparation, relation between
- coronary flow and loading conditions, rat, 747 AQ-A 39 and nodal potentials, 132
- Arrhythmias and cellular electrophysiological changes during myocardial "ischaemia" and reperfusion, 363, reprinted in October following page 648
- Arterial autogenous vein grafts, intimal hyperplasia: a new animal model, 446
- hyperresponsiveness, local, of vibration-induced white finger, factors modifying, 223
- Ascending aorta, turbulent blood flow, dogs, 427
- Atrial tissue, cholinergic effects, verapamil blockade, anaesthetised dog, 756
- Atrioventricular conduction and heart rate control, effects of digoxin, dog, 400
- induced by digitalis, baroreceptor control modification,
 633
- Atrium, human right, digitalis electro-physiological actions, 533 Authors' instructions, 1
- Autonomic nervous control of heart rate, 547

B

- B-aminoproprionitrile-fed turkey and detecting potential drug action on arterial tissue, 26
- Baroreceptor control modification of atrio-ventricular conduction induced by digitalis, 633
- sensitisation, vasodilator-induced, decreasing vulnerability to ventricular fibrillation, 106
- β-adrenergic receptor concentrations in man, unaltered by acute changes in noradrenaline levels, 184
- blockade adaptation, heart rate and QT interval, 649
- blocking agents, and triiodothyroacetic acid (triac), effect on myocardium, rats, 7
- Bi-exponential pressure decay, model of asynchronous left ventricular relaxation predicting, 482 Blood analogue for experimental study of flow-related thrombo-
- sis at prosthetic heart valves, 466
 flow, coronary impaired, and ventricular function, hearts of

hypertensive rats, 553

- total and transmural, changes induced by ethanol, 604
 distribution: origins of angina, 316
- instantaneous, through coronary artery stenosis, estimation, anaesthetised domestic swine, 499
- myocardial, collateral, differences following gradual vs abrupt coronary occlusion, 207
- - left ventricular, effects of pericardium, 595
- — nitroprusside effects, acute regional coronary ischaemia in conscious dogs with and without left ventricular distension, 267
- pressure, origins, 373

BOOK REVIEWS:

- CHAZOV E, SMIRNOV V and DHALLA N S editors Advances in myocardiology, 774
- in myocardiology, 774

 Ennis P J, Walton S and Jarritt P H Radionuclide ventricular function studies, 774
- FLAIM S F and Zells R editors Calcium blockers. Mechanics of action and clinical applications, 774

C

- Calcium antagonists and nodal potentials, 132
- intracellular, and adrenaline perfused rat heart, 88
- ionised, ischaemia and ventricular function, 415
- magnesium, temperature, and sinoatrial node function, 526 Calcium²⁺-free perfusion of isolated rat heart, early irreversible changes and discrepancy between functional impairments and release of cellular constituents, 476
- Cardiac depression, acute, adriamycin induced, verapamil, propranolol, and hydralazine in protection against, 43
- muscle, chick, taurine effects, 620
- patient, evolution: review, 313, 373, 437
- ventricular and Purkinje cells, effects of low [K⁺]_o on electrical activity, 243
- Cardiography, impedance, haemodynamic measurements, 728 Cardiomyopathy in generalised glycogenosis type II, cattle, 238 Cardioplegia and nifedipine, rat heart studies with St Thomas'
- cardioplegic solution, 719 Carotid body, vasculature, 33
- Catecholamine plasma levels and coronary occlusion, 568
- release, adrenal medullary, role in response to cold pressor test, 189
- Cation distributions in the hypertrophic myocardium (aortic constriction), rat, 170
- Cellular electrophysiological changes and arrhythmias during myocardial ''ischaemia'' and reperfusion, 363, reprinted in October following page 648
- Chemical sympathectomy, absence of effect on ventricular hypertrophy induced by hypoxia, young rabbits, 379
- Chlorpromazine, influence on lysosomal alterations during myocardial ischaemia, 407
- Colchicine stimulation of rate of contraction of heart cells in culture, 459
- Cold cardioplegic myocardial protection: technetium 99m pyrophosphate uptake and enzyme activity as parameters of injury, rat, 70
- pressor test, adrenal medullary catecholamine release role in response to, 189
- Collateral resistance after heel-raising exercise, superficial femoral artery, occlusion, 22
 Common carotid arteries, diseased, pulsed Doppler in diameter,
- velocity and volume flow measurement, 122
- Congestive cardiac failure, origins, 440

Contraction indices, regional measurements in intact hearts, analogue computation: instruments and techniques, 767 Coronary arteries, obstructive thrombi, conscious dog, method

for generating, 294: correspondence, 774

artery stenosis, instantaneous blood flow estimation, anaesthetised domestic swine, 499

 occlusion, gradual vs abrupt, collateral myocardial blood flow differences following, 207

- and plasma catecholamine levels, 568

— prolonged, hypertonic mannitol infusion during, 518
 — pressure-flow relations and the vascular waterfall, 162

 reactive hyperaemia, asynchronous transmural perfusion during, 200

- see also Blood flow, coronary

Cryosurgery in sheep heart, long term effects, 61

D

Dextran, radioactive particles for circulation study, animals, 656
Digital vasodilatation during mental stress, Raynaud's disease,
671

Digitalis electrophysiological actions in human right atrium, 533

— induced atrio-ventricular conduction, baroreceptor control modification, 633

Digoxin, heart rate and atrioventricular conduction, effects, dog, 400

Dipyridamole-induced capillary endothelial cell proliferation in rat heart, morphometry, 229

Dopamine influence, endoanaesthesia of left ventricular mechanoreceptors by steady state infusion of lignocaine, 740

Doppler, pulsed, in diameter, velocity and volume flow measurement in diseased common carotid arteries, 122 Drug action on arterial tissue, 26

E

Editorial: change of Editor, III (January)

Endoanaesthesia of left ventricular mechanoreceptors by steady state infusion of lignocaine and dopamine influence, 740 Enzyme activity changes after chronic alcohol ingestion, rat

heart, 691

Epidural analgesia, thoracic, electrophysiological effects, dog heart in situ, 259

Ethanol, coronary blood flow, total and transmural, changes induced by, 604

Evolution and the cardiac patient: review, 313, 373, 437 Excitation, overdrive, and overdrive suppression in Purkinje fibres, interaction between, dog, 608

Extracellular potassium in failing myocardium, 642

F

Fixed coupled ventricular ectopic complexes, mechanisms, 390 Flecainide and lorcainide, voltage- and time-dependent depression, 251

Forearm arterial compliance, estimation, hypertension, 331

G

Glycogen resynthesis after ischaemia, effect of uridine supply on, isolated perfused rat heart, 145

Glycogenosis type II, generalised, cardiomyopathy, cattle, 238

F

Heart(s) and Ca²⁺-free perfusion (calcium paradox phenomenon), 476

- cryosurgery, longterm effects, sheep, 61

 of hypertensive rats, impaired coronary flow and ventricular function, 553

massage and ventricular fibrillation, haemodynamic responses after defibrillation, effects of duration, dogs, 282

 rate, control, and atrioventricular conduction, effects of digoxin, dog, 400

- - autonomic nervous, 547

Hydralazine, verapamil, and propranolol in protection against acute cardiac depression induced by adriamycin, 43 Hyperaemia, coronary reactive, asynchronous transmural perfu-

sion during, 200

Hyperkalaemia on sinus nodal function, effects, dogs: sinoventricular conduction, 509

Hyperresponsiveness, local arterial, of vibration-induced white finger, factors modifying, 223

Hypertension, estimation of forearm arterial compliance, 331
— impaired coronary flow and ventricular function, rat hearts,
553

Hypertrophic myocardium (aortic constriction), cation distributions, rat, 170

I

Impedance cardiography, haemodynamic measurements, 728 Inosine, inotropic action on myocardium, dog, 735

- in ischaemic heart failure, 192

Instructions to Authors, 1

Instruments and techniques: Analogue computation of indices of contraction from regional measurements in intact hearts, 767

Intimal hyperplasia in arterial autogenous vein grafts: a new animal model, 446

Ischaemia, glycogen resynthesis, effect of uridine supply, isolated perfused rat heart, 145

induced changes, canine cardiac sarcoplasmic reticulum, 696
 metabolic responses, 489

Ischaemic heart failure, inosine in, 192

Isoprenaline, effects on blood flow, dogs, 427

induced ventricular fibrillation, effectiveness of antiarrhythmic agents in desoxycorticosterone-pretreated rats, 562

 infusion, adenosine potentiates coronary flow and inhibits oxygen consumption during, isolated perfused guinea pig hearts, 353

L

Lignocaine, endoanaesthesia of left ventricular mechanoreceptors by steady state infusion, dopamine influence, 740

Lipid accumulation, propranolol induced, and mitochondrial granularity, myocardial cells, 290

Lorcainide and flecainide, voltage- and time-dependent depression, 251

Low [K⁺]₀, effects on electrical activity of cardiac ventricular and Purkinje cells, 243

Lysolecithin and acute coronary ligation in the anaesthetised dog, 505

Lysosomal alterations during myocardial ischaemia, chlorpromazine influence, 407

M

Magnesium, calcium, temperature, and sinoatrial node function, 526

Mannitol, hypertonic, infusion during prolonged coronary occlusion, 518

Mechanoreceptors, left ventricular, endoanaesthesia by steady state infusion of lignocaine and dopamine influence, 740 Mental stress, Raynaud's disease. digital vasodilatation, 671

Metabolic responses to ischaemia, 489 Metoprolol, adaptation, heart rate and QT interval, 649

Metoprolol, adaptation, heart rate and QT interval, 649 Microtubules and effect of colchicine on contraction of heart

cells in culture, 459
Mitochondrial granularity, propranolol induced lipid accumulation, myocardial cells, 290

Mitral insufficiency, diastolic mitral, valve area estimation in, 762

- Monophasic action potential durations, dispersion, and activation times during pacing and ventricular premature stimula-
- Morphometric analysis of human hearts. 177
- Myocardial blood flow see Blood flow, myocardial
 cells, propranolol induced lipid accumulation and mitochondrial granularity, 290
- infarction, ST and QRS vector changes and myoglobin release, relation between, 589
- infarcts, canine, severity, in relation to indices of oxygen demand, 50
- ischaemia, acute, myocardial proteolysis during, 274
- lysosomal alterations, chlorpromazine influence on, 407 metabolic and flow correlates, 452
- and reperfusion, arrhythmias and cellular electrophysiological changes during, 363, reprinted in October following page 648
- transient, and vascular trauma, effects on coronary venous prostaglandin levels, dog, 127
- Myocardium, hypertrophic (aortic constriction), cation distributions, rat, 170
- inosine, inotropic action, dog, 735
- normal and failing, potassium measurements in extracellular spaces, cat, 642
- characterisation by morphometric analysis, 177
- rats, effect of triiodothyroacetic acid (triac) and betablocking agents on, 7
- Myoglobin release and ST and QRS vector changes, acute myocardial infarction, relation between, 589

- Neuro-endocrine control of water and salt balance, origins, 437 Nifedipine and cardioplegia, rat heart studies with St Thomas' cardioplegic solution, 719
- and nodal potentials, 132
- Nitroprusside effects on myocardial blood flow in acute regional coronary ischaemia in conscious dogs with and without left ventricular distension, 267
- Noradrenaline levels, acute changes do not alter lymphocyte β-adrenergic receptor concentrations in man, 184

0

- Obstructive thrombi in coronary arteries, conscious dog, method for generating, 294: correspondence, 774
- Overdrive excitation and overdrive suppression in Purkinje fibres, interaction between, dog, 608

- Pacing, and ventricular premature stimulation, dispersion of monophasic action potential durations and activation times during, dog, 152
- Perfused heart, new apex-ejecting preparation, relation between coronary flow and loading conditions, rat. 747
- Pericardium, effects on left ventricular myocardial blood flow, 595
- Peripheral resistance and steady state and instantaneous pressure-flow relationships, dog, 577
- Perturbations, post-stenotic, in dog aorta, noninvasive detection. 678
- Potassium measurements in extracellular spaces of normal and failing cat myocardium, 642
- Pressure-flow, coronary, relations and the vascular waterfall,
- relationships, steady state and instantaneous, characterisation, abdominal periphery, dog, 577
- Propranolol, adaptation, heart rate and QT interval, 649
- induced lipid accumulation and mitochondrial granularity, myocardial cells, 290

- verapamil, and hydralazine in protection against acute cardiac depression induced by adriamycin, 43
- Prostaglandins, levels, coronary venous, vascular trauma and transient myocardial ischaemia, effects on, dog, 127
- E type (PGE₂), modulation of adrenergic responses, man, 662
- Prosthetic heart valves, blood analogue for experimental study of flow-related thrombosis, 466
- Proteolysis, myocardial, during acute myocardial ischaemia, 274
- Pulmonary fluid volumes, intravascular and extravascular. III Response to sustained left atrial hypertension, 113
- oedema, origins, ventilation and perfusion, 315 Pulse wave velocity, apparent, superior vena cava, dog, 627 Purkinje and cardiac ventricular cells, effects of low [K+]o on
- electrical activity, 243 fibres, interaction between overdrive excitation and overdrive suppression, dog, 608

QRS and ST vector changes and myoglobin release in myocardial infarction, relation between, 589

- Raynaud's disease, digital vasodilatation during mental stress,
- Regional measurements in intact hearts, analogue computation of indices of contraction, 767 Renal function, origins, 375

- St Thomas' cardioplegic solution, nifedipine and cardioplegia, rat heart studies, 719
- Salt balance, neuro-endocrine control, origins, 437
- Sarcoplasmic reticulum, canine cardiac, ischaemia-induced changes, 696
- Sinoatrial node function, and magnesium, calcium, temperatures, 526
- Sinus nodal function in hyperkalaemia, dogs, 509
- Splenic blood flow measurement, using electromagnetic flowmetry and indium labelled platelets, anaesthetised dog, 710
- ST and QRS vector changes and myoglobin release in myocardial infarction, relation between, 589
- Stenoses, pathological, noninvasive detection, 678
- Superficial femoral artery, occlusion, collateral resistance after heel-raising exercise, 22
- Superior vena cava, pulse wave velocity apparent, dog, 627 Sympathectomy, chemical, absence of effect on ventricular hypertrophy induced by hypoxia, young rabbits, 379
- Systolic coronary artery compression, coronary vasodilator reserve impairment distal to, dog, 96
- time intervals, reproducibility: effect of temporal range of measurements, 339

T

- Taurine effects on cardiac muscle, chick, 620
- Temperature, magnesium, calcium, and sinoatrial node function, 526
- Thoracic epidural analgesia, electrophysiological effects, dog heart in situ, 259
- Thrombi, obstructive, in coronary arteries, conscious dog, method for generating, 294: correspondence, 774
- Thrombosis, flow-related, at prosthetic heart valves, blood analogue for experimental study, 466
- Transmural perfusion, asynchronous, during coronary reactive hyperaemia, 200
- Triiodothyroacetic acid (triac) and beta-blocking agents, effect on myocardium, rats, 7

U

- Ultrasound and aortic blood velocity measurement in healthy adults, 75
- Uridine supply, effect on glycogen resynthesis after ischaemia, isolated perfused rat heart, 145

V

- Vagotomy influence, coronary occlusion, plasma catecholamine levels, changes, 568
- Valve(s), area, diastolic mitral, estimation in mitral insufficiency, 762
- heart, prosthetic, blood analogue for experimental study of flow-related thrombosis, 466
- Vascular trauma, and transient myocardial ischaemia, effects on coronary venous prostaglandin levels, dog, 127
- waterfall, coronary pressure-flow relations, 162
 Vasodilator-induced baroreceptor sensitisation, decreased vul-
- nerability to ventricular fibrillation, 106 Ventricle (ventricular) ectopic complexes, fixed coupled,
- Ventricle (ventricular) ectopic complexes, fixed coupled mechanisms, 390
- fibrillation and heart massage, haemodynamic responses after defibrillation, effects of duration, dogs, 282

- vulnerability decreased by vasodilator-induced baroreceptor sensitisation, 106
- and impaired coronary flow, hearts of hypertensive rats, 553
- induced by hypoxia, chemical sympathectomy, absence of effect, young rabbits, 379
 - left, collagen, characterisation, rat, 15
- mechanoreceptor reflex, characterisation of afferent pathway. 214
- way, 214

 relaxation, asynchronous, predicting bi-exponential pressure decay, 482
- right, mechanics, 320
 Verapamil blockade, cholinergic effects on atrial specialised
- tissue, anaesthetised dog, 756

 propranolol, and hydralazine in protection against acute
- cardiac depression induced by adriamycin, 43 Vibration-induced white finger, local arterial hyperresponsiveness, factors modifying, 223

W

Water and salt balance, control, neuro-endocrine, origins, 437



CONTENTS

No 1 JANUARY 1983

Editorial	Ш
Instructions to Authors	1
Effect of triac and β-adrenergic blocking agents on the myocardium of developing rats: Peter C Pearce, Christine M Hawkey, Cecil Symons, and Eckhardt G J Olsen	7
Characterisation of left ventricular collagen in the rat: Ivan Medugorac and Ruthard Jacob	15
Effect of heel-raising exercise upon collateral resistance in patients with occlusion of the superficial femoral artery: K Agerskov and O Henriksen	22
The B-aminopropionitrile-fed turkey: a model for detecting potential drug action on arterial tissue: Charles F Simpson and Robert J Boucek	26
The vasculature of the carotid body: Donald Heath, Ross Jago, and Paul Smith .	33
Verapamil, propranolol, and hydralazine protect against the acute cardiac depression induced by adriamycin: Joan Wikman-Coffelt, Marianne Rapcsak, Richard Sievers, Jean Lucien Rouleau, and William W Parmley	43
Severity of canine myocardial infarcts in relation to indices of oxygen demand: preservation of myocardial creatine kinase activity by vagal stimulation and propranolol: N L Sammel, R M Norris, C F Hughes, R N Johnson, N G Ashton, and R	
L Elliott	50
No 2 FEBRUARY 1983	
Longterm effects of cryosurgery in the sheep heart: Takuro Misaki, Sally P Allwork, and Hugh H Bentall	61
A study of cold cardioplegic myocardial protection in rats: an experimental model using the uptake of technetium 99m pyrophosphate and enzyme activity as parameters of injury: C G A McGregor, J Hannan, A F Smith, A L Muir, and D J Wheatley	70
Aortic blood velocity measurement in healthy adults using a simple ultrasound technique: D H R Mowat, N E Haites, and J M Rawles	75
Alcohol-induced congestive cardiomyopathy: an animal model: George R Noren, Nancy A Staley, Stanley Einzig, Frank L Mikell, and Richard W Asinger.	81
Effects of adrenaline on a compartment of slowly-exchangeable calcium in the perfused rat heart: Suzanne V Lamont and Gregory J Barritt	88
Coronary vasodilator reserve impairment distal to systolic coronary artery compression in dogs: Jacques R Rouleau, Louis Roy, Jean-G Dumesnil, and Gilles R Dagenais	96
Decreased vulnerability to ventricular fibrillation by vasodilator-induced bororeceptor sensitisation: Peter R Kowey, Richard L Verrier, and Bernard Lown	106
Intravascular and extravascular pulmonary fluid volumes. III Response to sustained left atrial hypertension: Robert A Slutsky and Charles B Higgins	113
Pulsed Doppler: a classification of results of diameter, velocity and volume flow measurement in diseased common carotid arteries: Dermont E Fitzgerald, Ann M	122
LI Shallondessy and Vincent I Keaveny	1//

No 3 MARCH 1983

Effects of vascular trauma and transient myocardial ischaemia on coronary venous prostaglandin levels in the dog: Ian A Bailey, Frank Carey, Duncan Haworth, and	
Howard J Smith	127
Effect of nifedipine and AQ-A 39 on the sinoatrial and atrioventricular nodes of the rabbit and their antiarrhythmic action on atrioventricular nodal reentrant tachycardia: Jochen Senges, Ioannis Rizos, Johannes Brachmann, Günter Anders, Rolf Jauernig, Hans-Dieter Hamman, and Wolfgang Kübler.	132
Effect of uridine supply on glycogen resynthesis after ischaemia in the isolated perfused rat heart: J Aussedat	145
Dispersion of monophasic action potential durations and activation times during atrial pacing, ventricular pacing, and ventricular premature stimulation in canine ventricles: Chien-Suu Kuo, Jan Peder Amlie, Kazuo Munakata, C Pratap Reddy, and Borys Surawicz	152
Coronary pressure-flow relations and the vascular waterfall: N Westerhof, P Sipkema, and G A van Huis	162
Cation distributions in the hypertrophic myocardium (aortic constriction) of the rat: Philip I Polimeni, Anthony F Cutilletta, and Maureen D Otten	170
Characterisation of normal human myocardium by means of morphometric analysis: M A Gregory, C J Brouckaert, and I D Whitton	177
Acute changes in noradrenaline levels do not alter lymphocyte β-adrenergic receptor concentrations in man: J R Sowers, M Connelly-Fittinghoff, M L Tuck, and J F Krall	184
No 4 APRIL 1983	
The role of adrenal medullary catecholamine release in the response to a cold pressor test: Mary F Cummings, Peter M Steele, Leo J M Mahar, Derek B Frewin, and W John Russell	189
Inosine infusion in dogs with acute ischaemic left ventricular failure: favourable effects on myocardial performance and metabolism: Otto A Smiseth	192
Asynchronous transmural perfusion during coronary reactive hyperaemia: H Fred Downey, George J Crystal, and Fouad A Bashour	200
Differences in collateral myocardial blood flow following gradual vs abrupt coronary occlusion: Randolph E Patterson, Beverly A Jones-Collins, Roger Aamodt, and Young Moo Ro	207
The left ventricular mechanoreceptor reflex: characterisation of the afferent pathway: Robert W Emery, Jorge A Estrin, Gordon M Wahler, and Irwin J Fox.	214
Factors modifying the local arterial hyperresponsiveness of vibration-induced white finger: Takehiko Azuma and Toshio Ohhashi	223
Dipyridamole-induced capillary endothelial cell proliferation in the rat heart—a morphometric investigation: Torsten Mattfeldt and Gerhard Mall	229
Cardiomyopathy in generalised glycogenosis type II in cattle: Wayne F Robinson, John McC Howell, and Peter R Dorling	238
Effects of low $[K^+]_0$ on the electrical activity of human cardiac ventricular and Purkinje cells: Georges Christé	243

No 5 MAY 1983

Voltage- and time-dependent depression of maximum rate of depolarisation of guinea-pig ventricular action potentials by two new antiarrhythmic drugs, flecainide and lorcainide: Terence J Campbell and E Miles Vaughan Williams.	251
Electrophysiological effects of thoracic epidural analgesia in the dog heart in situ: Ragnar Hotvedt, Eivind S Platou, and Helge Refsum.	259
Effects of nitroprusside on myocardial blood flow in acute regional coronary ischaemia in conscious dogs with and without left ventricular distension: Malavalli A Gopal, William A Neill, and John M Oxendine	267
Myocardial proteolysis during acute myocardial ischaemia: Roberto Bolli, Nancy J Davenport, Robert E Goldstein, and Stephen E Epstein	274
Effects of duration of ventricular fibrillation and heart massage on haemodynamic responses after defibrillation in dogs: Reint H Geuze and Jan de Vente	282
Propranolol induced lipid accumulation and mitochondrial granularity in myocardial cells: Svein Rotevatn, Harald G Jodalen, and Reidar K Lie	290
A method for generating obstructive thrombi in the coronary arteries of the conscious dog: Ikuo Hayashi, Tarik Wasfie, Paul Freed, Merlin Ekstrom, Jerzy Polanski, Hiroshi Yoshizu, Paul Stein, and Adrian Kantrowitz	294
Possible source of adenosine triphosphate released from rat myocytes in response to hypoxia and acidosis: Carole A Williams and Thomas Forrester	301
No 6 JUNE 1983	
REVIEW: Evolution and the cardiac patient: 1 Ventilation and perfusion: origins of pulmonary oedema; 2 Distribution of blood flow: origins of angina: Peter Harris	313
Right ventricular mechanics: a comparison of models: Torbjørn Sund and Hroar Piene	320
Estimation of forearm arterial compliance in normal and hypertensive men from simultaneous pressure and flow measurements in the brachial artery, using a pulsed Doppler device and a first-order arterial model during diastole: A Ch Simon, S Laurent, J A Levenson, J E Bouthier, and M E Safar	331
Reproducibility of the systolic time intervals: effect of the temporal range of measurements: Markku Kupari	339
Kinetics of onset of rate-dependent effects of Class I antiarrhythmic drugs are important in determining their effects on refractoriness in guinea-pig ventricle, and provide a theoretical basis for their subclassification: Terence J Campbell.	344
Adenosine potentiates coronary flow and inhibits oxygen consumption during isoprenaline infusion in isolated perfused guinea pig hearts: Allen E Beranek and David F Stowe	353
Arrhythmias and cellular electrophysiological changes during myocardial "ischaemia" and reperfusion: William J Penny and Desmond J Sheridan	363
No 7 JULY 1983	
REVIEW: Evolution and the cardiac patient: 3 Origins of the blood pressure; 4 Origins of renal function: Peter Harris	373
The absence of effect of chemical sympathectomy on ventricular hypertrophy induced by hypoxia in young rabbits: E M Vaughan Williams and I D Dukes .	379

Mechanisms of fixed coupled ventricular ectopic complexes: C W Vellani and A Murray	390									
Effects of digoxin on the control of heart rate and atrioventricular conduction in the dog: Don Wallick, Sherry L Stuesse, Yukitaka Masuda, and Matthew N Levy	400									
Kenneth R Chien, J Stanley Crie, Robert S Decker, and Kern Wildenthal										
Global and regional function in the regionally ischaemic left ventricle related to plasma ionised calcium: Gillian A Geffin, Lambertus J Drop, Dennis D O'Keefe, Simon V Rosenthal, John B Newell, M Alex Jacocks, and Willard M Daggett with the technical assistance of James S Titus	415									
Effects of digoxin on the control of heart rate and atrioventricular conduction in the dog: Don Wallick, Sherry L Stuesse, Yukitaka Masuda, and Matthew N Levy Influence of chlorpromazine on lysosomal alterations during myocardial ischaemia: Kenneth R Chien, J Stanley Crie, Robert S Decker, and Kern Wildenthal Global and regional function in the regionally ischaemic left ventricle related to plasma ionised calcium: Gillian A Geffin, Lambertus J Drop, Dennis D O'Keefe, Simon V Rosenthal, John B Newell, M Alex Jacocks, and Willard M Daggett with the technical assistance of James S Titus Turbulent blood flow in the ascending aorta of dogs: Herman L Falsetti, Robyn J Carroll, Richard D Swope, and C J Chen with the technical assistance of J A Cramer, R A Length, and D E Laughlin No 8 AUGUST 1983 REVIEW: Evolution and the cardiac patient: 5 Origins of neuro-endocrine control of water and salt balance; 6 Origins of congestive cardiac failure: Peter Harris. Intimal hyperplasia in arterial autogenous vein grafts: a new animal model: Andrew J Murday, Anthony H Gershlick, Y Denise Syndercombe-Court, Simon J Ledingham, Nicholas J Betts, C Terence Lewis, and Peter G Mills Metabolic and flow correlates of myocardial ischaemia: D J Hearse, R Crome, D M Yellon, and R Wyse Colchicine stimulates the rate of contraction of heart cells in culture: Irwin Klein A blood analogue for the experimental study of flow-related thrombosis at prosthetic heart valves: Jeffrey M O Lewis and Norman Macleod Ca ²⁺ -free perfusion of isolated rat heart: early irreversible changes and discrepancy between functional impairments and release of cellular constituents: Jos M Koomen, Jan Noordhoek, and Ariaen N E Zimmerman A model of asynchronous left ventricular relaxation predicting the bi-exponential pressure decay: Ronald W Brower, Simon Meij, and Patrick W Serruys Two different metabolic responses to ischaemia: inherent variability or artefact? Steven C Dennis, Michael J Shattock, David J Hearse, Michael R Ball, Milena Sochor, and Patricia										
No 8 AUGUST 1983										
	437									
J Murday, Anthony H Gershlick, Y Denise Syndercombe-Court, Simon J Ledingham,	446									
	452									
Colchicine stimulates the rate of contraction of heart cells in culture: Irwin Klein	459									
	466									
between functional impairments and release of cellular constituents: Jos M	476									
	482									
Steven C Dennis, Michael J Shattock, David J Hearse, Michael R Ball, Milena Sochor,	489									
Estimation of instantaneous blood flow through a rigid, coronary artery stenosis in anaesthetised domestic swine: Ying Sun, Albert S Most, William Ohley, and Henry	499									
No 9 SEPTEMBER 1983										
	505									
	509									
Effect of hypertonic mannitol infusion during prolonged coronary occlusion: Eric R Powers and Paul J Cannon	518									

Differences between rabbit sinoatrial pacemakers in their response to Mg, Ca and temperature: Tobias Op't Hof, Albert J C Mackaay, Wim K Bleeker, Habo J Jongsma, and Lennart N Bouman	526
Observations on the biphasic nature of digitalis electrophysiological actions in the human right atrium: Roger P Hayward, John Hamer, Peter Taggart, and Richard Emanuel	533
Autonomic nervous control of heart rate: sympathetic-parasympathetic interactions and age related differences: Sharon E Mace and Matthew N Levy	547
Impaired coronary flow and ventricular function in hearts of hypertensive rats: Abraham Alfaro, Thomas F Schaible, Ashwani Malhotra, Tada Yipintsoi, and James	552
Scheuer Effectiveness of antiarrhythmic agents in preventing death in ventricular fibrillation induced by isoprenaline in desoxycorticosterone-pretreated rats: Mark Green,	553
Giancarlo Guideri, and David Lehr Influence of vagotomy on changes in feline plasma catecholamine levels induced by occlusion of either the left or right coronary vessel: Daniel J Williford, Anthony P Zavadil III, Richard A Walsh, Virginia Weise, Irwin J Kopin, and Richard A Gillis	562
No 10 OCTOBER 1983	
Steady state and instantaneous pressure-flow relationships: characterisation in the canine abdominal periphery: R Braakman, P Sipkema, and N Westerhof	577
Relation between ST and QRS vector changes and myoglobin release in acute myocardial infarction: Magnus Sederholm and Christer Sylvén	589
Role of the pericardium in the regulation of myocardial blood flow and its distribution in the normal and acutely failing left ventricle of the dog: Jean R Allard, Edward W Gertz, Edward D Verrier, J David Bristow, and Julien I E Hoffman	595
Changes in total and transmural coronary blood flow induced by ethanol: Sergio Pescio, Pilar Macho, Mario Penna, and Raúl J Domenech	604
Interaction between overdrive excitation and overdrive suppression in canine Purkinje fibres: Fermín Valenzuela and Mario Vassalle	608
Protection by oral pretreatment with taurine against the negative inotropic effects of low-calcium medium on isolated perfused chick heart: Akihiko Sawamura, Junichi Azuma, Hisato Harada, Hiroshi Hasegawa, Kyoko Ogura, Nick Sperelakis, and Susumu Kishimoto	620
Apparent pulse wave velocity in the canine superior vena cava: Jaak Minten, Frans van de Werf, André E Aubert, Hugo Kesteloot, and Hilaire de Geest	627
Modification of the baroreceptor control of atrio-ventricular conduction induced by digitalis in man: Alberto Ferrari, Oscar Bonazzi, Luisa Gregorini, Maria Gardumi, Rodolfo Perondi, and Giuseppe Mancia	633
Potassium measurements in the extracellular spaces of normal and failing cat myocardium: Francis G Martin, Alan R Freeman, Thomas A Marino, and Steven R Houser	642
No 11 NOVEMBER 1983	
Heart rate and QT interval in subjects adapted to beta-blockade: bradycardia and hypotension as uncorrelated adaptations: J S Birkhead, E M Vaughan Williams, D J	
Gwilt, A Tanqueray, and C Cazes	649

Radioactive dextran Nosslin, and U Ro			for st	tudyin	g cir	culatio	on in	anim	als: F	Sved	lman,	B	656
Role of PGE ₂ in the Serneri, G Masotti										Gian	G N	eri	662
Digital vasodilatation during mental stress in patients with Raynaud's disease: Jonathan L Halperin, Richard A Cohen, and Jay D Coffman											671		
Estimation of blood-flow quality by statistical analysis or an ultrasonic Doppler signal: application to the study of perturbations caused by a vascular stenosis: Jean-Paul Moutet, Alain Herment, Jean-Paul Guglielmi, Maciej Piechocki, and Pierre Peronneau											is:	678	
Enzyme activity cha Ágota Andó, Miklo											ín Éd	es,	691
Ischaemia-induced changes in canine cardiac sarcoplasmic reticulum: Kamon Imai, Taitzer Wang, Ronald W Millard, Muhammad Ashraf, Evangelia G Kranias, Goro Asano, Angela O Grassi de Gende, Taku Nagao, R John Solaro, and Arnold Schwartz											696		
Measurement of sple flowmetry and ind Reavy, R N Bell,	ium la	abelle	d pla	telets				Math	63		0		710
		No	12	DECE	MBEI	R 1983	3						
Nifedipine and card solution: Fumio Y J Hearse Reproducibility of h	aman	noto,	Allar	SM	annin	g, Ma	rk V	Brain	nbridį	ge, an	d Da	vid	719
Veigl and W V Jud Mechanism of the in Czarnecki and Mar	otrop			of inos	ine o	n cani	ne m	yocar	dium	Wlo	dzimi	erz	728 735
Endoanaesthesia of lignocaine and the Schmidt, and Hein	left v	entric ence	cular of de										740
A new apex-ejecting and loading condi Richard Sievers, Jo	perfu	sed ra	nt hea	nan-C	offelt,	Robe	rt J C	offelt,	Mari	coron anne F	ary fle Rapes	ow ak,	747
Blockade by verapa anaesthetised dog Bouzouita, Lucien	mil o	of che	oline Timo	rgic el ur-Cha	ffects ah, Je	on a	trial	specia	lised				757
A pressure independ area in mitral insuradioactive Krypt volume: W S Seits	lept o officie on ind	rifice ncy: (equa corre	ation for	or the	e estin	ac cat	heter	isatio	n data	usin	ga	762
Instruments and tech Analogue computat	ion of	indi								surer	nents	in	
intact hearts: Max	CJ La	b, Ive	or Ga	rtside,	and	Sylvia	Was	serma	nn				767
Correspondence	*							*		*			774
Book Reviews Volume Index													774 775

